



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/709,323	11/13/2000	Ralph Michael Fay	7143	3508

7590 04/05/2007
E. Joseph Gess
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT	PAPER NUMBER
----------	--------------

3694

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/709,323

Applicant(s)

FAY ET AL.

Examiner

Susanna M. Diaz

Art Unit

3694

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-24, 26-37 and 40-65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-24, 26-37 and 40-65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on November 27, 2006 and January 3, 2007 have been entered.

Claims 1-4, 6-24, 26-37, and 40-65 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-4, 6-24, 26-37, and 40-65 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-4, 6-24, 26, 29-37, 40-57, and 60-65 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Under the statutory requirement of 35 U.S.C. § 101, a claimed invention must produce a useful, concrete, and tangible result. For a claim to be useful, it must yield a result that is specific, substantial, and credible (MPEP § 2107). A concrete result is one

that is substantially repeatable, i.e., it produces substantially the same result over and over again (*In re Swartz*, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000)).

In order to be tangible, a claimed invention must set forth a practical application that generates a real-world result, i.e., the claim must be more than a mere abstraction (*Benson*, 409 U.S. at 71-72, 175 USPQ at 676-77). Additionally, a claim may not preempt abstract ideas, laws of nature or natural phenomena nor may a claim preempt every "substantial practical application" of an abstract idea, law of nature or natural phenomena because it would in practical effect be a patent on the judicial exceptions themselves (*Gottschalk v. Benson*, 409 U.S. 63, 71-72 (1972)). (Please refer to the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" for further explanation of the statutory requirement of 35 U.S.C. § 101.)

While claims 1-4, 6-24, 26, 29-37, 40-57, and 60-65 produce a useful and concrete result, they fail to produce a result that is tangible. For example, the result is never displayed or otherwise transformed into a form in which it has an effect in the real world; therefore, claims 1-4, 6-24, 26, 29-37, 40-57, and 60-65 are non-statutory.

Please note that the step of presenting modified project information to a user is tangible (as seen in claims 27, 28, 58, and 59).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 32-37, 40-59, 63, and 65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 63 is dependent from cancelled claim 5, which is improper. For examination purposes, it will be assumed that claim 63 is dependent from independent claim 1 instead.

There is no antecedent basis for "the desired performance level" in lines 4-5 of claim 32. All dependent claims inherit this rejection as well.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claims 1-4, 6-14, 16-18, 20, 26, 27, 32-37, 44, 45, 47-55, 57, 60, and 63 are rejected under 35 U.S.C. 102(a) as being anticipated by Monks et al. ("Audiooptimization: Goal-Based Acoustic Design").

Monks discloses a computer-implemented method for enhancing performance of a project (¶¶ 10, 11, 63), comprising the steps of:

[Claim 1] inputting project information and a desired performance level (Figure 8; ¶¶ 10, 11, 48, 78), wherein the project information includes information regarding sound

Art Unit: 3694

paths between rooms and the desired performance level includes a maximum acceptable noise level within a room (Tables 1-4; ¶¶ 17, 21, 23 -- The IACC is a measure of the correlation between signals at the ears of a listener. This measurement is based, in part, on the sound paths and noise level measurements; ¶¶ 21, 23, 48 -- Scalar values or ranges of desired sound levels within different areas are set. The limit at one end of the range is the maximum; Figures 13, 14; ¶¶ 29-30 -- A sound area is divided up into various geometrics shapes that represent the sub-areas. These sub-areas may correspond to balconies, etc.; ¶¶ 70-78 -- Some sub-areas are delineated by walls, such as the stage shell. Since the sub-areas may have defined boundaries and their corresponding geometry and materials affect how sound is transmitted throughout the entire sound area, these sub-areas are effectively interpreted as rooms. A room is merely a defined area or space);

selecting, by a computer, enhancement solutions based on the project information (¶¶ 11, 13, 14, 40, 63, 76, 78);

modifying the inputted project information to incorporate the selected enhancement solutions (¶¶ 11, 13, 14, 40, 76, 78);

[Claim 2] wherein the project information comprises building plans for a structure (¶ 5);

[Claim 3] wherein the project information comprises information on the uses of rooms within the structure (¶¶ 21, 23, 48, 65-67, 70-72);

[Claim 4] wherein the project information comprises information on interior structural elements (Figures 1-18);

[Claim 6] wherein the enhancement solutions are selected from a plurality of enhancement solutions stored in a sound control center (¶¶ 10, 74, 76, 78 – Computer-searchable solutions are stored in a design space);

[Claim 7] wherein each enhancement solution is combinable with another enhancement solution to form a combination of enhancement solutions (¶ 76);

[Claim 8] wherein a system performance rating is associated with each combination of enhancement solutions, and wherein each system performance rating is stored in the sound control center (¶¶ 10, 74, 76, 78 – Computer-searchable solutions are stored in a design space. The optimization and corresponding recommendations most closely achieving the desired system performance are identified);

[Claim 9] wherein each system performance rating is a field sound transmission class rating (¶¶ 21, 23, 48);

[Claim 10] wherein the step of selecting further comprises the step of choosing a combination of enhancement solutions with a system performance rating equal to or greater than the desired performance level (¶¶ 10, 74, 76, 78 – Computer-searchable solutions are stored in a design space. The optimization and corresponding recommendations most closely achieving the desired system performance are identified);

[Claim 11] wherein a cost is associated with each combination of enhancement solutions and wherein the combination of enhancement solutions is also chosen based on cost (¶¶ 50, 72, 76);

[Claim 12] wherein the step of selecting further comprises the step of reviewing the project information to determine improvement areas (¶¶ 11, 13, 14, 63, 76, 78);

[Claim 13] wherein the enhancement solutions are selected based upon the determined improvement areas (¶¶ 11, 13, 14, 63, 76, 78);

[Claim 14] wherein the determined improvement areas include acoustical weak links (¶¶ 11, 13, 14, 59-63, 67, 76, 78);

[Claim 16] wherein at least one of the enhancement solutions involves the addition of a sound control component (¶¶ 68-68, 73-76);

[Claim 17] wherein the sound control component is a sound control material installed in a wall, floor, or ceiling assembly (¶¶ 68-67, 73-76);

[Claim 18] wherein the sound control component is a material for sealing wall, floor, and ceiling perimeters (¶¶ 68-69, 73-76);

[Claim 20] where at least one of the enhancement solutions involves the indirect positioning of interior components (¶¶ 75-76);

[Claim 26] wherein the modified inputted information describes a project operating at the desired performance level (¶¶ 11, 13, 14, 40, 76, 78);

[Claim 27] further comprising the step of presenting the modified project information to a user (Tables 1-4; ¶¶ 11, 13, 14, 40, 76, 78);

[Claim 60] wherein each system performance rating is verified by experimentation (12, 13, 64, 74, 82);

[Claim 63] wherein the desired performance level is a field system sound transmission rating (Tables 1-4; ¶¶ 17, 21, 23 -- The IACC is a measure of the

Art Unit: 3694

correlation between signals at the ears of a listener. This measurement is based, in part, on the sound paths and noise level measurements; ¶¶ 21, 23, 48 – Scalar values or ranges of desired sound levels within different areas are set).

[Claims 32-37, 44, 45, 47-55, 57] Claims 32-37, 44, 45, 47-55, and 57 recite limitations already addressed by the rejection of claims 1-4, 6-14, 16-18, 20, 26 above; therefore, the same rejection applies.

As per claims 34-37, the location of the central computer, design department, and reviewer does not affect the recited structural or functional elements; therefore, the location of each will not serve to patentably distinguish the claimed invention over the prior art.

Regarding claims 50-52, Monks discloses that the material information comprises information on a sound absorbing material, a sound blocking material, and at least one of the plurality of enhancement options comprises structural relocation information (¶¶ 68-69, 73-76).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3694

10. Claims 15, 19, 21-24, 28-31, 40-43, 46, 56, 58, 59, 62, 64, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monks et al. ("Audiooptimization: Goal-Based Acoustic Design"), as applied to claims 1-4, 6-14, 16-18, 20, 26, 27, 32-37, 44, 45, 47-55, 57, 60, and 63 above, in view of "Sound Control for Commercial and Residential Buildings" (herein referred to as "Sound Control").

Monks discloses a goal-based acoustic design system that allows users to create target sound levels and have the algorithm work backward to establish various acoustical parameters for implementing the target sound levels (§ 10). Monks does not explicitly disclose some of the details regarding the specific acoustical factors that are taken into account as part of the modeling process; however, Sound Control discusses many of the variables that are commonly considered when planning sound control for commercial and residential buildings. Since Sound Control outlines much of the theoretical and practical knowledge based on industry standards (e.g., see page 1, "The North American Insulation Manufacturers Association (NAIMA) developed these recommendations based on the result of numerous acoustical tests using American Society for Testing and Materials (ASTM) methods") and needed for many acoustical reduction projects, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Monks to incorporate the theory and practice discussed by Sound Control in order to facilitate more accurate modeling results that are useful in real-world applications and conform to industry standards.

Regarding claims 15, 19, 21-23, 62, and 64, Monks does not teach the recited details, yet Sound Control teaches that [Claim 15] the weak links include penetrating items, construction discontinuities, sound transmission through structural components, and cross-talk through ducts (page 1, Methods of Sound Control; pages 15-19), [Claim 19] wherein the sound control component is an acoustically enhanced door (page 15), [Claim 21] wherein the interior components comprise electrical outlets, air ducts, and fluid-filled pipes (pages 15-19), [Claim 22] wherein at least one of the enhancement solutions involves the discontinuous construction of structural elements of the project (pages 1, 15-19), [Claim 23] wherein the at least one enhancement solution comprises the staggering of wall studs (page 3, Metal Framing vs. Wood Framing), [Claim 62] wherein the weak links include components having component performance ratings less than the desired performance level (pages 4-6), and [Claim 64] wherein the desired performance level includes the anticipated noise level in adjacent areas to the rooms (page 2 – Office to office sound transmission is taken into account). The Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Monks to incorporate the details of claims 15, 19, 21-23, 62, and 64 (as taught by Sound Control) in order to facilitate more accurate modeling results that are useful in real-world applications and conform to industry standards (as discussed above).

As per claim 24, neither Monks nor Sound Control expressly teaches that the at least one enhancement solution comprises the addition of a cut line in a floor or floor elements; however, Official Notice is taken that it is old and well-known in the art of

sound control to add a cut line in a floor or floor elements in order to mitigate noise pollution. (This Official Notice is now taken to be Admitted Prior Art since never properly challenged by Applicant.) Therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the Monks-Sound Control combination to include the addition of a cut line in a floor or floor elements as one of its available solutions in order to provide more comprehensive analysis and solutions to its customers, thereby making the Monks-Sound Control combination more appealing to its customers.

In reference to claim 28, Monks does not expressly disclose that the modified project information is transferred from the sound control center to a remote computer. However, Official Notice is taken that it is old and well-known in the art of testing and networking to provide testing results remotely to another user. This allows remotely located people to quickly, inexpensively, and conveniently collaborate on a project. (This Official Notice is now taken to be Admitted Prior Art since never properly challenged by Applicant.) Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Monks' modified project information to be transferred from the sound control center to a remote computer (claim 28) in order to facilitate that Monks and its remotely located customers can quickly, inexpensively, and conveniently collaborate on a noise reduction project.

As per claims 29 and 30, the Monks-Sound Control combination suggests building materials and specifications for improving acoustical conditions, yet neither

Azonic nor Sound Control expressly teaches the provision of a bill of materials *per se*, including related cost information. However, Official Notice is taken that it is old and well-known in the art of construction to convert an assessment of what materials are required and how much they cost into a formal bill of materials in order to place an order for the needed materials from a third party supplier. (This Official Notice is now taken to be Admitted Prior Art since never properly challenged by Applicant.) Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention for the Monks-Sound Control combination to adapt its modified project information to include a bill of materials that includes cost information in order to facilitate the placement of an order for the needed materials from a third party supplier.

Furthermore, as per claims 31 and 59, neither Monks nor Sound Control explicitly provides a list of tasks based on the selected enhancement solutions, such as component installation instructions; however, Official Notice is taken that it is old and well-known in the art of project management to plan a list of tasks associated with accomplishing building recommendations and plan a budget accordingly based on both materials and labor costs. Task assignment facilitates efficient planning of a project so that the project is more likely to be completed in a timely fashion. Budget planning based on both materials and labor costs helps to ensure that the project is economically feasible. (This Official Notice is now taken to be Admitted Prior Art since never properly challenged by Applicant.) Since the customers of the Monks-Sound Control combination implement its recommendations, the Examiner asserts that it would have

been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt the Monks-Sound Control combination to include a list of tasks based on the selected enhancement solutions (claim 31), such as component installation instructions (claim 59) in order to facilitate efficient planning of a project so that the project is more likely to be completed in a timely and economically feasible fashion.

[Claims 40-43, 46, 56, 58, 59, 65] Claims 40-43, 46, 56, 58, 59, 65 recite limitations already addressed by the rejection of claims 1-4, 6-24, 26-37, 44, 45, 47-55, 57, 60, and 62-64 above; therefore, the same rejection applies. (Please note that the rejection of claim 59 is addressed in more detail with the rejection of claim 31 above.)

Regarding claim 40, Monks uses a computerized system to search for and provide enhancement solutions to a user, yet it does not expressly disclose the use of a central computer for receiving project information through a network from a user computer and returning modified project information to the user at his/her computer. Official Notice is taken that it is old and well-known in the art to utilize a central computer for gathering testing information and distributing analysis results in order to facilitate a central contact location for processing analysis requests from globally located customers (via the customers' computers). This arrangement facilitate quick, efficient, and economic communications with remotely located customers while attracting a larger customer base since communications may be conducted globally. (This Official Notice is now taken to be Admitted Prior Art since never properly challenged by Applicant.) Therefore, the Examiner asserts that it would have been

Art Unit: 3694

obvious to one of ordinary skill in the art at the time of Applicant's invention to run Monks' computerized system at a central computer for receiving project information through a network from a user computer (claim 40) in order to facilitate quick, efficient, and economic communications with remotely located customers while attracting a larger customer base since communications may be conducted globally.

Regarding claims 41 and 43, Monks does not teach the recited details, yet Sound Control teaches that [Claim 41] the project information comprises building plans for a residential structure (title, Sound Control for Commercial and Residential Buildings; page 4, Residential Construction) and [Claim 43] the project information comprises information on the uses of rooms with the residential structure (page 6, Living rooms, Bedrooms). The Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify Monks to incorporate the details of claims 41 and 43 (as taught by Sound Control) in order to facilitate more accurate modeling results that are useful in real-world applications and conform to industry standards (as discussed above).

As per claim 46, Monks does not expressly disclose an acoustical laboratory located in the main facility that determines each system performance rating; however, Sound Control discloses that an acoustical laboratory determines system performance ratings (discussed above). The Monks-Sound Control combination does not expressly teach that the acoustical laboratory is located in the main facility. First, it should also be noted that the location of the acoustical laboratory has no effect on the recited structure or functionality and therefore does not patentably distinguish the claimed invention over

the prior art. Second, the Examiner takes Official Notice that it is old and well-known in the art of acoustical testing for an acoustical testing company to house its laboratory in a main facility. A company can choose to place their laboratory wherever they see fit, e.g., based on cost considerations and/or convenience. (This Official Notice is now taken to be Admitted Prior Art since never properly challenged by Applicant.)

Therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt the Monks-Sound Control combination such that the acoustical laboratory is located in a main facility (claim 46) in order to allow Monks-Sound Control employees to conveniently access the acoustical laboratory, as needed.

Regarding claim 56, neither Monks nor Sound Control expressly teaches that partner computers, remotely located from the sound control center, transmit updated material and cost information to the sound control center. However, Official Notice is taken that it is old and well-known in the supply chain art for product suppliers/vendors to remotely provide their customers with electronic material and cost updates for supplies. This arrangement helps to inspire confidence among the parties involved and enables the sound control center to provide its customers with as accurate pricing information as possible. (This Official Notice is now taken to be Admitted Prior Art since never properly challenged by Applicant.) Therefore, the Examiner submits that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the Monks-Sound Control combination to incorporate partner computers, remotely located from the sound control center, to transmit updated material and cost

information to the sound control center in order to help inspire confidence among the parties involved and enable the sound control center to provide its customers with as accurate pricing information as possible.

As per claim 58, Monks discloses that the modified project information is presented on a user computer (Tables 1-4; ¶¶ 11, 13, 14, 40, 76, 78).

Allowable Subject Matter

11. Claim 61 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (571) 272-6733. The examiner can normally be reached on Monday-Friday, 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3694

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Susanna M. Diaz
Primary Examiner
Art Unit 3694

April 2, 2007